

Abstract

The invention relates to an exhaust gas turbocharger (1) having a housing and having a shaft (2) which is arranged so as to be capable of rotating about its longitudinal axis in the housing and on which a turbine wheel (4) and a compressor wheel (3) are seated and which is guided in radial bearings (5, 6) which are embodied as magnetic bearings and in at least one axial bearing (9), the bearings (5, 6, 9) each having a bearing plate (12, 14, 16) which is seated on the shaft (2) and at least one stator (19, 20, 21, 22, 49, 50) which lies axially opposite said axial bearing (9) on at least one side, forming a gap. In order to cool the bearings, it is proposed according to the invention that at least one flow duct (62, 65), via which at least one bearing gap can have an air stream applied to it, is formed in the housing.